

## Overview of Louisiana Transportation Research Center

Presented to  
Michigan DOT Research Peer Exchange  
December 2007

## LTRC

Created by  
R.S. 48:105  
in 1986

Cooperative research, technology transfer  
and training center jointly administered  
by  
LADOTD and LSU

## LTRC's Mission

Effectively merge the resources of DOTD/LTRC and universities to  
provide transportation related research, education and training in a  
manner that:

- Addresses DOTD problems/needs
- Addresses transportation industry problems/needs
- Supports local government
- Advances transportation technology
- Benefits Louisiana's universities
- Provides optimal return on taxpayers' dollars

## Functions and Duties of LTRC

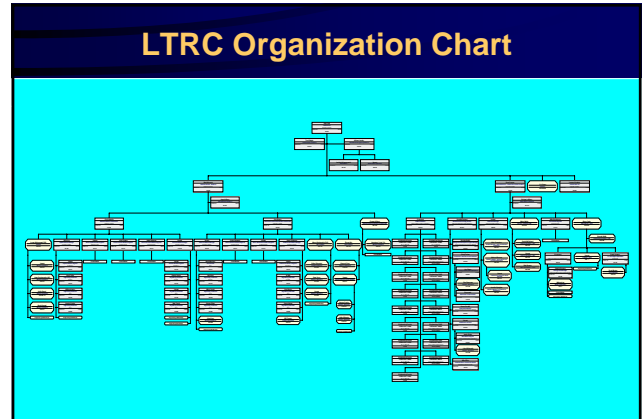
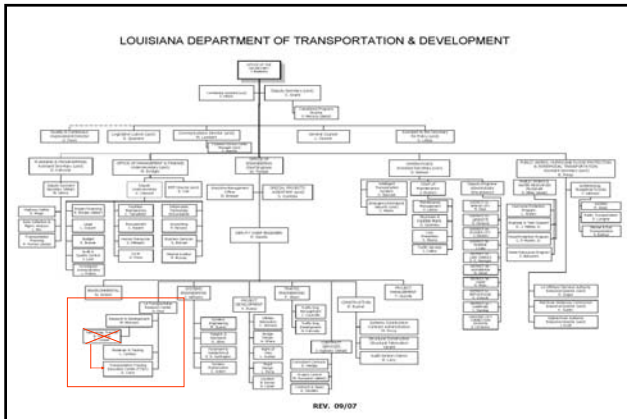
- To develop & conduct a nationally recognized research program in transportation systems
- To offer educational & training programs
- To develop & implement a technology transfer program
- To establish cooperative relationships with universities, associations & agencies
- To report & publish research findings

## Policy Committee

Advises LTRC and makes recommendations concerning research and technology transfer programs, fiscal-year budgets, and reviews activities and progress of the center.

## LTRC Policy Committee

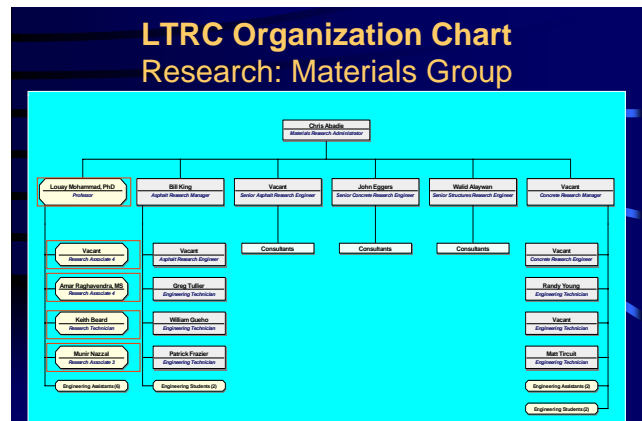
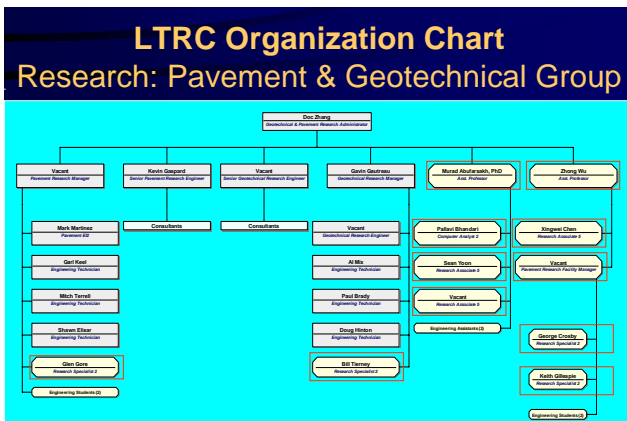
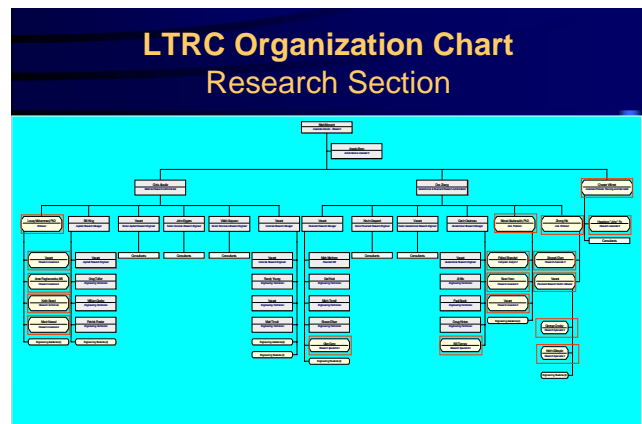
- DOTD - secretary appoints 3 members
- Universities - one member from each with civil department
  - LSU
  - USL
  - Southern
  - LTU
  - UNO
  - Tulane
  - McNeese
- LTRC director
- FHWA - invited observers



### LTRC Staff

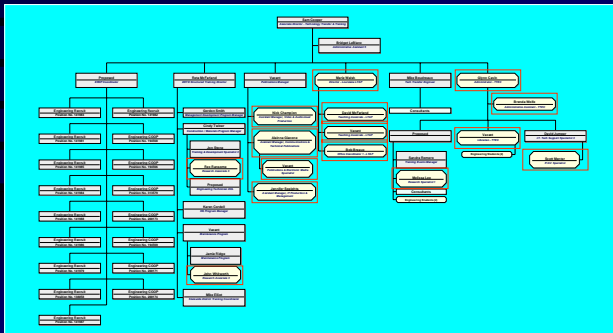
	Director	R & D	Training	Total
DOTD Personnel	2	27	15	44
LSU Personnel	1	18	12	31
<b>TOTAL</b>	<b>3</b>	<b>45</b>	<b>27</b>	<b>75</b>

- Full-time classified employees of department
- Faculty and staff of university
- Graduate and undergraduate students not shown



## LTRC Organization

### Training & Technology Transfer Section



## LTRC Facilities

- ☐ LTRC Main Office (LSU BR campus)  
**10,920 sq. ft.**
- ☐ Laboratories (LSU BR campus)  
**11,760 sq. ft.**
- ☐ Training Center (LSU BR campus)  
**11,000 sq. ft.**
- ☐ Pavement Research Facility (Port Allen)  
**6 acres site**

## LTRC

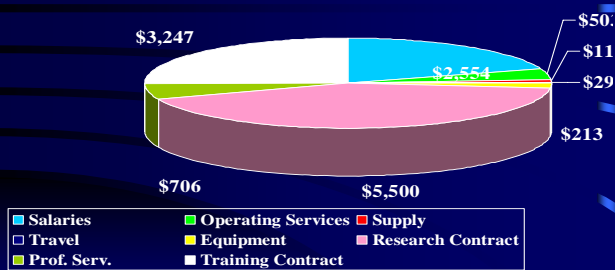
### Transportation Training & Education Center



## Louisiana Pavement Research Facility (ALF™)



## LTRC 07-08 Budget (\$1000's)



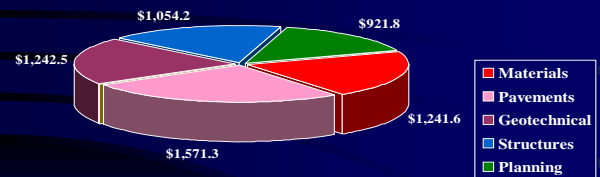
## WORK PROGRAM FUNDING

- Federal SP&R Part II (Internal research program)
- State funding (External University contracts)
- Federal (IBRC, Corp of Engineers, etc)
- Federal STP (Technology Transfer, Workforce Development)
- Self Generated (NCHRP, Private)
- Other funding (non LTRC budgeted)

## WORK PROGRAM STUDIES

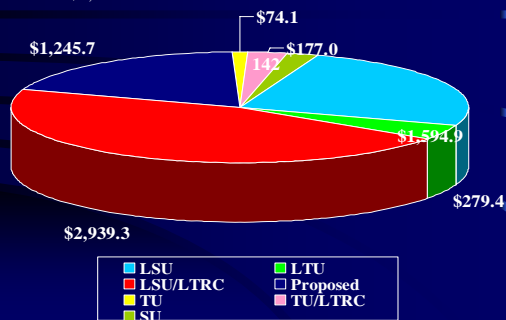
Fiscal Year	04	05	06	07	08
• SP&R					
■ Active	19	21	15	18	18
■ Proposed	24	19	28	19	11
• State					
■ Active	20	17	17	8	19
■ Proposed	7	8	13	16	8
■ Proposed RPIC projects				0	6
• Self-Generated					
■ Active	2	1	2	4	6
■ Proposed	2	2	2	2	6
• Other Funded					
■ Active			2	4	5
■ Proposed			1	0	3

## Research by Technical Area (\$1000's)



## Contract Research (\$1000's)

Work Program Total: \$6,452k



## LTRC Support for Higher Education

- Research opportunities for faculty
- Theses, dissertations for grad students
- Education/training opportunities for faculty
- Student worker program (LSU)
- Co-op program (7 universities)
- Senior CE project support program
- Teaching by LTRC research & adjunct professors
- TIRE Program

## LTRC Training / Education Role

- Engineering continuing education
  - PDH requirements by board of registration
  - Transportation related topics
  - Conferences, seminars, workshops
- Job skills training for technicians
  - Construction
  - Design
  - Maintenance
- Management / professional development programs
  - CPTP
  - Management topics
  - Construction project management
  - TQM
  - Strategic planning

## LTRC Training and Education Role

- Major customers
  - 4800 DOTD personnel
  - Consultants
  - Contractors
  - Local government personnel
- Major resources
  - LTRC tech transfer/training staff
  - Technology transfer center
  - National highway institute
  - Universities
  - Consultants
  - LTRC research staff

## Technology Transfer Center (LTAP)

- One of 51 T<sup>2</sup> centers in USA
- Cooperative effort of DOTD, FHWA, and LSU
- Goal is to help improve local transportation agencies by providing:
  - Training
  - Technical materials
  - Assistance and information

## LTRC Foundation, Inc.

Connecting Government, Industry, and Academia

Louisiana Transportation Research Center

## What Is the LTRC Foundation?

- The Foundation is a nonprofit corporation formed to enhance and support LTRC
- LTRC is committed to establishing cooperation in the transportation community to improve transportation systems in Louisiana
- The Foundation represents a unique opportunity for government, industry, and academia to work together

## Functions of the Foundation

- Can solicit and accept donations of funds and equipment to enhance and support LTRC
- Permits LTRC to partner with other transportation interests / customers in providing services
- Permits LTRC to purchase liability insurance necessary to receive research grants

## Board of Directors

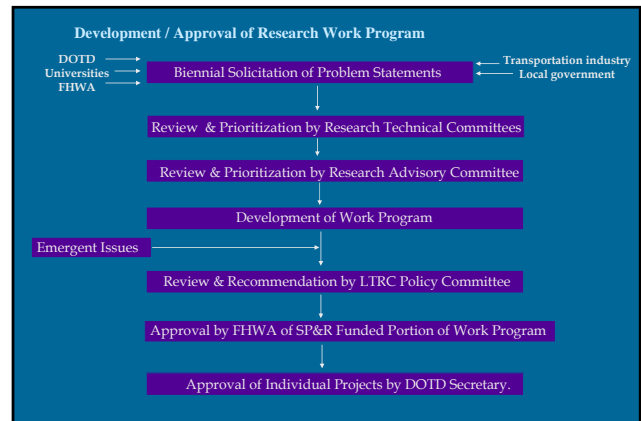
- **LTRC** - Director, Assoc. Director for Research and Assoc. Director for Technology Transfer
- **DOTD** - Deputy Secretary, Chief Engineer, Assistant Secretary, Planning & Programming
- **ACADEMIA** - Civil Engineering Dept. Heads representing LSU, LTU, UNO, USL, Tulane, Southern and McNeese
- **INDUSTRY** - 6 positions to be named

## What Are the Goals of the Foundation?

- Constructing an education and training facility for the transportation community
- Enhancing the research/equipment capabilities of LTRC
- Endowing LTRC research professorships

# LTRC

## Development & Approval of Research Work Program



## Challenges

- Manpower drain
- Unscheduled technical assistance work
- Timely delivery of projects
- Measuring and Documenting implementation
- Performance measurements

## LTRC World Wide Web Home Page

<http://www.ltrc.lsu.edu>